## (19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 11 August 2005 (11.08.2005)

**PCT** 

## (10) International Publication Number WO 2005/073668 A1

(51) International Patent Classification: G01B 11/00, G03F 7/00

(21) International Application Number:

PCT/SE2005/000100

**(22) International Filing Date:** 28 January 2005 (28.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 60/540,141 29 January 2004 (29.01.2004) US

(71) Applicant (for all designated States except US): MI-CRONIC LASER SYSTEMS AB [SE/SE]; IPR & Legal Dep., Nytorpsvägen 9, S-183 03 Täby (SE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): STIBLERT, Lars [SE/SE]; Delsjövägen 51, S-412 70 Göteborg (SE). EK-BERG, Peter [SE/SE]; Norsbacken 5, S-181 31 Lidingö (SE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

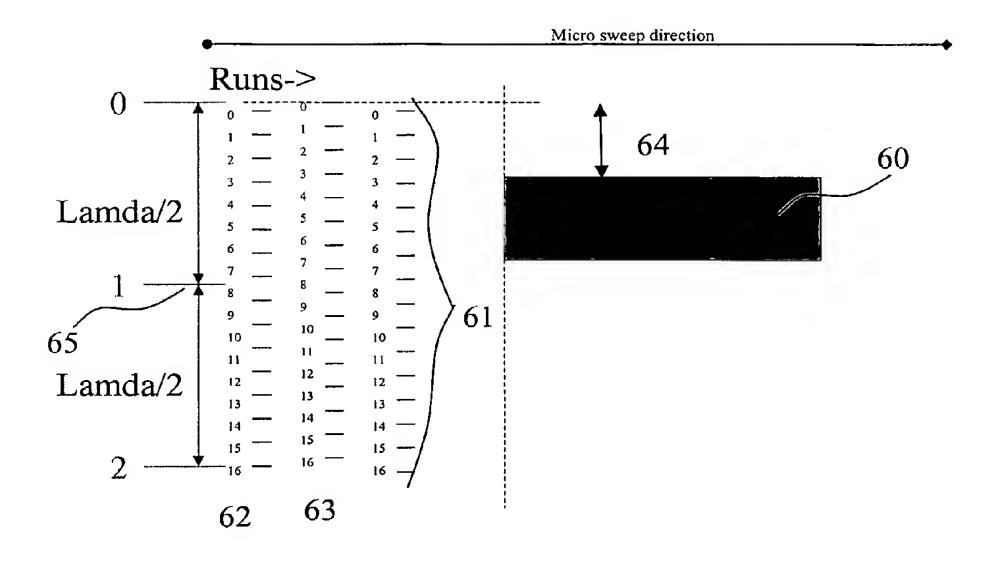
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) Title: A METHOD FOR MEASURING THE POSITION OF A MARK IN A DEFLECTOR SYSTEM



(57) Abstract: The present invention relates to a method for determining the coordinates of an arbitrarily shaped pattern in a deflector system. The method basically comprises the steps of: moving the pattern in a first direction (X), calculating the position of the edge of the pattern by counting the number of micro sweeps, performed in a perpendicular direction (Y), until the edge is detected, and determining the coordinates by relating the number of counted micro sweeps to the speed of the movement of the pattern. The invention also relates to software implementing the method.

## WO 2005/073668 A1



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.